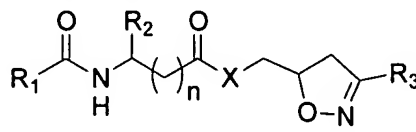


LISTING OF THE CLAIMS

1. (currently amended) A method of treating Celiac Sprue ~~and/or dermatitis herpetiformis~~, the method comprising:

orally administering to a patient an effective dose of a tissue transglutaminase (tTGase) inhibitor wherein said tTGase inhibitor ~~is or comprises a dihydroisoxazole moiety~~ has the formula:



wherein R_1 is selected from aryloether, aryl, alkylether or alkyl group;

R_2 is selected from the group consisting of (S)-Bn, (S)-CO₂Me, (S)-Me, (R)-Bn, (S)-CH₂CONHBn, (S)-(1H-indol-yl)-methyl, and (S)-(4-hydroxy-phenyl)-methyl;

R_3 is selected from F, I, Cl, and Br;

n is from 0 to 3; and X is selected from the group consisting of O and NH,

wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

2. (canceled)

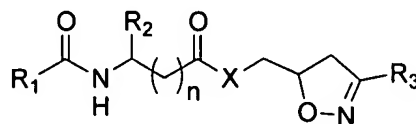
3. (original) The method of Claim 1, wherein said tTGase inhibitor is administered with a glutenase.

4. (canceled)

5. (original) The method according to Claim 1, wherein said tTGase inhibitor is contained in a formulation that comprises an enteric coating.

6-10 (canceled)

11. (currently amended) A method of treating Celiac Sprue, the method comprising:
orally administering to a patient an effective dose of a tTGase inhibitor, wherein said tTGase inhibitor has the formula:



wherein R_1 and R_2 are independently selected from H, alkyl, alkenyl, cycloalkyl, aryl, heteroalkyl, heteroaryl, alkoxy, alkylthio, arakyl, aralkenyl, halo, haloalkyl, haloalkoxy, heterocyclyl, and heterocyclylalkyl groups, an amino acid, a peptide, a peptidomimetic, or a peptidic protecting group; wherein R_2 can additionally be selected from the group consisting of (SEQ ID NO:1) LPYPQPQLPY, (SEQ ID NO:2) LPFPQPQLPF-NH₂, (SEQ ID NO:3) LPYPQPQLP, (SEQ ID NO:4) LPYPQPQLPYQPQPF, LP-X₂₋₁₅, where X₂₋₁₅ is a peptide consisting of any 2-15 amino acid residues followed by a C-terminal proline; R_3 is selected from F, I, Cl, and Br; n is from 0 to 10; and X is selected from the group consisting of O and NH, wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

12. (previously presented) The method of Claim 11, wherein R_1 is selected from the group consisting of BnO, Me, Cbz, Fmoc, Boc, PQP, Ac-PQP, (SEQ ID NO:5) PQPQLPYQP, (SEQ ID NO:6) Ac-PQPQLFPQP, (SEQ ID NO:7) QLQFPQP, (SEQ ID NO:8) LQLQFPQPLPYQP, X₂₋₁₅-P, where X₂₋₁₅ is a peptide consisting of any 2-15 amino acid residues followed by a N-terminal proline.

13. (original) The method of Claim 11, wherein R_2 is selected from the group consisting of (S)-Bn, (S)-CO₂Me, (S)-Me, (R)-Bn, (S)-CH₂CONHBn, (S)-(1*H*-indol-yl)-methyl, (S)-(4-hydroxyphenyl)-methyl, OMe, OtBu, Gly, Gly-NH₂, LPY, LPF-NH₂.

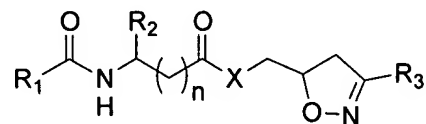
14. (original) The method according to Claim 11, wherein said tTGase inhibitor is selected from the group consisting of:

{{(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-phenyl-ethyl}-carbamic acid benzyl ester; (S)-2-Benzyloxycarbonylamino-4-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-butyric acid methyl ester; (S)-2-Benzyloxycarbonylamino-*N*-(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-succinamic acid methyl ester; (S)-2-Benzyloxycarbonylamino-3-phenyl-propionic acid 3-bromo-4,5-dihydro-isoxazol-5-ylmethyl ester; {{(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-ethyl}-carbamic acid benzyl ester; (S)-2-Acetylamino-*N*-(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-phenyl-propionamide; {{(R)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-phenyl-ethyl}-carbamic acid benzyl ester; {{(S)-2-Benzylcarbamoyl-1-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-ethyl}-carbamic acid benzyl ester; [(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(1*H*-indol-3-yl)-ethyl]-carbamic acid benzyl ester; {{(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-phenyl-ethyl}-carbamic

acid benzyl ester; and [(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl]-carbamic acid benzyl ester.

15 – 18 (canceled)

19. (new) A method of treating dermatitis herpetiformis, the method comprising:
orally administering to a patient an effective dose of a tTGase inhibitor wherein said tTGase inhibitor has the formula:



wherein R₁ is selected from arylolether, aryl, alkylether or alkyl group;

R₂ is selected from the group consisting of (s)-Bn, (s)-CO₂Me, (s)-Me, (R)-Bn, (S)-CH₂CONHBn, (S)-(1*H*-inol-yl)-methyl, and (S)-(4-hydroxy-phenyl)-methyl;

R₃ is selected from F, I, Cl, and Br;

n is from 0 to 3; and X is selected from the group consisting of O and NH,

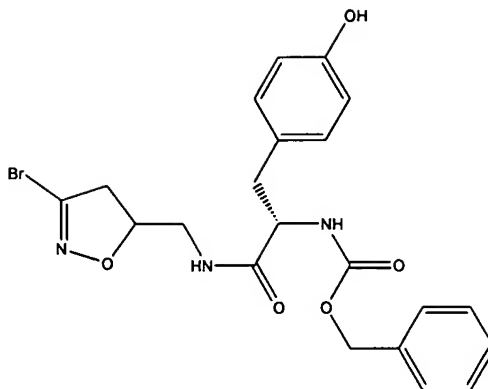
wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

20. (new) The method according to Claim 19, wherein said tTGase inhibitor is [(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl]-carbamic acid benzyl ester.

21. (new) The method of Claim 19, wherein said tTGase inhibitor is administered with a glutenase.

22. (new) The method according to Claim 19, wherein said tTGase inhibitor is contained in a formulation that comprises an enteric coating.

23. (new) A method of treating Celiac Sprue, the method comprising:
orally administering to a patient an effective dose of tTGase inhibitor:



[(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl]-carbamic acid benzyl ester;

wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

24. (new) The method of Claim 23, wherein said tTGase inhibitor is administered with a glutenase.

25. (new) The method according to Claim 23, wherein said tTGase inhibitor is contained in a formulation that comprises an enteric coating.